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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,712	03/14/2006	Werner Erhardt	14219-096US1 P2003.0024 U	5779
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EXAMINER				
CHU, HELEN OK				
ART UNIT		PAPER NUMBER		
1795				
NOTIFICATION DATE		DELIVERY MODE		
09/09/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary

Application No.

10/542,712

Applicant(s)

ERHARDT ET AL.

Examiner

HELEN O.K. CHU

Art Unit

1795

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 8,11,12 and 17-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,10,13-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 July 2009 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB008)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Applicants' response to Election/Restriction has been received on 7/6/09.
2. The text of those sections of Title 35, U.S.C. code not included in this action can be found in the prior Office Action.

Election/Restrictions

3. Applicant's election without traverse of Group I claims 1-7, 9, 10, 13-16 in the reply filed on 7/6/09 is acknowledged.

Priority

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

5. The IDS submitted on 7/20/05 and 6/30/09 has been considered.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation "a film that defines the channels" is unclear to the Examiner. It is unclear because the recitation does not further define how the film and channels are correlated. For example; it can be interpreted as integral, touching

and marking the limits of or to be fixed onto. Appropriate corrections or further clarification is required.

Claims Analysis

8. For the purposes of compact prosecution, the recitation "further comprising a film that defines the channels," will be interpreted as the film and the channels by touching and marking the limits of.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1-5, 14-16 rejected under 35 U.S.C. 102(b) as being anticipated by Newcomb (US Patent 4,348,712).

Regarding claim 1, the Newcomb reference discloses an electrode for use with an electrochemical cell having dielectric fluids (Applicants' liquid electrolyte). The electrode comprising channels (Fig. 6-10; 34, 35) that is capable of holding the dielectric fluids (1:45-55).

Regarding claim 2, the Newcomb reference electrode further comprises a film that defines the channels (Fig. 6-10; 34, 35; 7:15-25; 2, 25-35).

Regarding claim 3, the Newcomb reference discloses the channels comprises grooves on the surface on a surface of the electrode (5:1-5)

Regarding claim 4, the Newcomb reference discloses the channels are embossed into the electrodes (Title, 2:19-22)

Regarding claim 5, the Newcomb reference discloses a film on the surface of the electrode wherein the channels comprise regions of the electrode that are not covered by the film (Fig.6-11, 7:1-22)

Regarding claim 14, the Newcomb reference discloses multiple layers of electrodes positioned one on top of another and the multiple layers comprises channels that are capable of holding liquid electrolyte (Fig. 6)

Regarding claim 15, the Newcomb reference discloses an electrode roll wherein the multiple layers comprise two electrodes (fig. 6) wound together (fig. 1).

Regarding claim 16, the Newcomb reference discloses an electrochemical cell comprising a liquid electrolyte and multiple layers of electrodes (Fig. 6) positioned one on top of the other (Fig. 1) and wherein the multiple layers comprises channels that hold the liquid (1:45-55)

11. Claims 1-4, 6, 7, 9, 10, 14-16 rejected under 35 U.S.C. 102(b) as being anticipated by Chapman (US Patent 4,439,812).

Regarding claim 1, the Chapman reference discloses an electrode for use with an electrochemical cell having dielectric fluids (Applicants' liquid electrolyte). The electrode comprising channels that is capable of holding the dielectric fluids (1:45-55).

Regarding claim 2, the Chapman reference the electrode further comprises a film that defines the channels (Fig. 1).

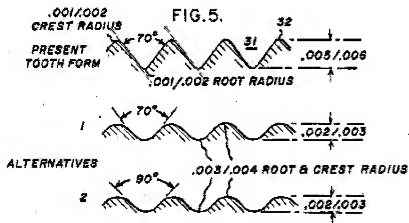
Regarding claim 3, the Chapman reference discloses the channels comprise grooves on the surface on a surface of the electrode (1:45-55)

Regarding claim 4, the Chapman reference discloses the channels are embossed into the electrodes (2:48-55)

Regarding claim 6, the Chapman reference discloses that at least one of the channels are have a width between 0.1mm to 1mm (Claim 3 and claim 4)

Regarding claim 7, the Chapman reference discloses the channels have a depth of between 10 microns to 200 microns (3:30-35).

Regarding claim 9, the Chapman reference discloses that the channels comprises substantially straight lines that are substantially parallel to one another and that have substantially same lengths (Fig. 5 denoted by the red dotted line below, 3:55-65)



Regarding claim 10, the Chapman reference discloses the electrode extends along a longitudinal direction (1:40-50) and wherein the channels run substantially diagonal to the longitudinal direction (2:62-63)

Regarding claim 14, the Chapman reference discloses multiple layers of electrodes positioned one on top of another and the multiple layers comprises channels that are capable of holding liquid electrolyte (Fig. 1)

Regarding claim 15, the Chapman reference discloses an electrode roll wherein the multiple layers comprise two electrodes wound together (fig. 1).

Regarding claim 16, the Chapman reference discloses an electrochemical cell comprising a liquid electrolyte and multiple layers of electrodes positioned one on top of the other (Fig. 1) and wherein the multiple layers comprises channels that hold the liquid (1:45-55)

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Newcomb (US Patent 4,348,712) in view of Andelman (US Patent 5,547,581).

The Newcomb reference discloses the claimed invention above and further incorporated herein. The Newcomb reference discloses the electrodes to be metallic but is silent pertaining the a carbon powder coating on the metal films, however, the

Andelman reference discloses the electrodes of high surface area may comprise electrical conductivity enhancing additives such as activated carbon coated particles (3:45-50). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate additives such as activated carbon coated particles as an additive for a capacitor electrode as disclosed by Andelman onto the metallic capacitor electrode as disclosed by the Newcomb reference in order to increase capacitance and enhance properties of the capacitor.

14. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chapman (US Patent 4,439,812) in view of Andelman (US Patent 5,547,581).

The Chapman reference discloses the claimed invention above and further incorporated herein. The Chapman reference discloses the electrodes to be metallic but is silent pertaining the a carbon powder coating on the metal films, however, the Andelman reference discloses the electrodes of high surface area may comprise electrical conductivity enhancing additives such as activated carbon coated particles (3:45-50). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate additives such as activated carbon coated particles as an additive for a capacitor electrode as disclosed by Andelman onto the metallic capacitor electrode as disclosed by the Chapman reference in order to increase capacitance and enhance properties of the capacitor.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN O.K. CHU whose telephone number is (571)272-5162. The examiner can normally be reached on Monday-Friday 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Helen O.K. Chu/
Examiner, Art Unit 1795